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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,961	01/25/2002	Kuan-Yu Lee	9585-0302	8795
73552	7590	02/05/2008	EXAMINER	
Stolowitz Ford Cowger LLP			WORKU, NEGUSSIE	
621 SW Morrison St			ART UNIT	
Suite 600			PAPER NUMBER	
Portland, OR 97205			2625	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/054,961

Applicant(s)

LEE, KUAN-YU

Examiner

Negussie Worku

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-19 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-19 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. This is a replay to the application filed on 11/27/07, in which, claims 7, 20-23 are cancelled, and claims 1-6 and 8-19 and 24-27 are pending. Applicant's arguments, in view of the newly amended limitation with respect to the rejection(s) of claim(s) 1 and 9, have been considered, and therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Office action submitted below. Applicant argues that the prior art does not teach "wherein said the first scanning direction is generally opposite to said second scanning direction" as amended, examiner has incorporated Chiang '780' to further teach this limitation.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 8-19, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (USP 2003/0048487 A1), in view of Chiang (USP 6,147,780).

With respect to claim 1, Johnston et al. teaches a two-directions scanning method, (300 of fig 3, col.3, paragraph 0040, lines 9-14); moving a scan head (scanning device 312 of fig 3), along a first scanning direction to proceed with a first scanning procedure, col.3, paragraph 0040, lines 9-14) wherein a first image is got from said first scanning procedure (300 of fig 4, performs an initial scan of an image to generate image data, col.3, paragraph 0043, lines 1-9); moving said scan head along a second scanning direction to proceed with a second scanning procedure in a second dpi, (user inter face 400 of fig 4, includes a resolution selection control 420 of fig 4, third resolution could be selected col.4, paragraph 0056 lines 1-14, and see resolution setting table of paragraph 0056 of col.4) wherein a second image is obtained from said second scanning procedure (preview scanning resolution 150 dpi, col.4, paragraph 0056, lines 1-20); and transforming said second image to become a third image according to said scope and said second dpi by using a program (200 dpi scan resolution value of col.4, paragraph 0056, lines 1-30).

Johnston '487' dose not teach or disclose wherein said first scanning direction is generally opposite to said second scanning direction.

Chiang '780' in the same area of image scanning device which takes sample form a different position to have increased resolution, teaches wherein said first scanning direction is generally opposite to said second scanning direction (as shown in fig 1n and to, slidable scanning module 18 of fig 1, moves back and forth during scanning of the document, col.2, lines 445-50+).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Johnson '487' by the teaching of Chiang '780' for the purpose of obtaining a scanner which takes samples from different position of a document to increase its resolution, with out having quite expensive a high resolution scanning module, as suggested by Chiang '780' col.1, lines 5-10+).

With respect to claim 2, Johnston et al. discloses the method (fig 3-5), wherein said first dpi is lower than said third dpi (the first 100 dpi is lower than the third 200 dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 3, Johnston et al. discloses the method (fig 3-5), wherein said second dpi is lower than said third dpi (the second 150 dpi is lower than the third 200 dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 4, Johnston et al. discloses the method (fig 3-5), wherein said third dpi is lower than said the highest dpi of said scan head (the third 200 dpi is the highest dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 5, Johnston et al. discloses the method (fig 3-5), wherein said program transforms said second image to become said third image by adjusting a graph image coordinate, (co.4, paragraph 0051, lines 7-10).

With respect to claim 6, Johnston et al. discloses the method (fig 3-5), wherein said program transforms said second image to become said third image by adjusting a dpi scale, (col.4, paragraph 0056, lines 1-15).

With respect to claim 8, Johnston et al. discloses the method (fig 5), wherein said first scanning procedure is a preview procedure, (col.4, paragraph 0054, lines 1-5).

With respect to claim 9, Johnston et al. teaches a two-directions scanning method, (300 of fig 3, col.3, paragraph 0040, lines 9-14) said two directions scanning method (fig 3) comprises: selecting a two-directions scanning mode in a user interface, (user interface 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14); setting a first dpi in a user interface (user interface 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14); driving a scan head (scanning device 312 of fig 3) to make said scan head move along a first scanning direction to proceed with a first scanning procedure, col.3, paragraph 0040, lines 9-14) wherein a first image is got from said first scanning procedure (300 of fig 4, performs an initial scan of an image to generate image data, col.3, paragraph 0043, lines 1-9); setting a third dpi and a scope in said user interface (user interface 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14) and said scan head moving along a second scanning direction to proceed with a second scanning procedure in a third dpi at the same time, (user interface 400 of

fig 4, includes a resolution selection control 420 of fig 4, third resolution could be selected col.4, paragraph 0056 lines 1-14, and see resolution setting table of paragraph 0056 of col.4) wherein a second image is got from said second scanning procedure and saved in the memory (314 of fig 3, preview scanning resolution 150 dpi, col.4, paragraph 0056, lines 1-20); and selecting a program mode transforming said second image to become a third image according to said scope and said third by using a program (200 dpi scan resolution value of col.4, paragraph 0056, lines 1-30)

Johnston '487' dose not teach or disclose wherein said first scanning direction is generally opposite to said second scanning direction.

Chiang '780' in the same area of image scanning device which takes sample form a different position to have increased resolution, teaches wherein said first scanning direction is generally opposite to said second scanning direction (as shown in fig 1n and to, slid able scanning module 18 of fig 1, moves back and forth during scanning of the document, col.2, lines 445-50+).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Johnson '487' by the teaching of Chiang '780' for the purpose of obtaining a scanner which takes samples from different position of a document to increase its resolution, with out having quite expensive a high resolution scanning module, as suggested by Chiang '780' col.1, lines 5-10+).

With respect to claim 10, Johnston et al. discloses the method (fig 3-5), wherein said first dpi is lower than said third dpi (the first 100 dpi is lower than the third 200 dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 11, Johnston et al. discloses the method (fig 3-5), wherein said first dpi is lower than said third dpi (the first 100 dpi is lower than the third 200 dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 12, Johnston et al. discloses the method (fig 3-5), wherein said second dpi is lower than said third dpi (the second 150 dpi is lower than the third 200 dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 13, Johnston et al. discloses the method (fig 3-5), wherein said third dpi is lower than said the highest dpi of said scan head (the third 200 dpi is the highest dpi, see col.4, paragraph 0056, see user resolution selection table).

With respect to claim 14, Johnston et al. discloses the method (fig 3-5), wherein said program transforms said second image to become said third image by adjusting a graph image coordinate, (co.4, paragraph 0051, lines 7-10).

With respect to claim 15, Johnston et al. discloses the method (fig 3-5), wherein said program transforms said second image to become said third image by adjusting a dpi scale, (col.4, paragraph 0056, lines 1-15).

With respect to claim 16, Johnston et al. discloses the method (fig 3-5), wherein a fourth dpi resolution is set in said user interface after said third image is formed, (300 dpi, user inter face 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14).

With respect to claim 17, Johnston et al. discloses the method (fig 3-5), wherein said second image is transformed to become a fourth image according to said fourth dpi by using said program after said fourth dpi is set, (300 dpi, user inter face 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14).

With respect to claim 18, Johnston et al. discloses the method (fig 3-5), wherein said can be used to replace said first image (300 dpi, user inter face 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14).

With respect to claim 19, Johnston et al. discloses the method (fig 3-5), wherein said program transforms said second image to become said third image by adjusting a dpi scale, (col.4, paragraph 0056, lines 1-15).

With respect to claim 24, Johnston et al. discloses the method (fig 3-5), further comprising setting at least one of the first dpi, the second dpi, the third dpi, and the scope of the first image in a user interface, (300 dpi, user inter face 400 of fig 4, includes a resolution selection control 420 of fig 4, col.4, paragraph 0056 lines 1-14).

With respect to claim 25, Johnston et al. discloses the method (fig 3-5), further comprising setting at least one of the first dpi, the second dpi, the third dpi, and the scope of the first image in a user interface, (col.4, paragraph 0056, lines 1-16+)

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiang (USP 6,147,780).

With respect to claim 26, Chiang '780' a two-directions scanning method, (shown in fig1) comprising: moving a scan head (a moving scanning module 18 of fig 2) along a first scanning direction (forward and backward direction, fig 2) to proceed with a first

scanning procedure using a first dpi, wherein a first image is obtained from said first scanning procedure (plurality of resolution sampling unit in different position, as scanning module 28 moves along the scanning path, col.2, lines 45-85+);

moving said scan head along a second scanning direction to proceed with a second scanning procedure in a second dpi, (scanning module 18 moves along the scanning carriage) wherein a second image is obtained from said second scanning procedure (col.2, lines 55-65); and

using said scan head to proceed with a third scanning procedure in a third dpi, wherein a third image is obtained from said third scanning procedure (plurality of resolution sapling unit 25 of scanner 24 to determine the resolution, col.3, lines 1-10+); and wherein said first scanning direction is generally opposite to said second scanning direction (as shown in fig 1n and to, slide able scanning module 18 of fig 1, moves back and forth during scanning of the document, col.2, lines 445-50+).

With respect to claim 27, Chiang '780' a two-directions scanning system, (shown in fig1) comprising: means for moving a scan head (driving device 20 of fig 2, a means for moving scanning module 18 of fig 2) along a first scanning direction (forward and backward direction, fig 2) to proceed with a first scanning procedure using a first dpi, wherein a first image is obtained from said first scanning procedure (plurality of resolution sampling unit in different position, as scanning module 28 moves along the scanning path, col.2, lines 45-85+);

moving said scan head along a second scanning direction to proceed with a second scanning procedure in a second dpi, (driving device 20 of fig 2, a means for scanning module 18 moves along the scanning carriage) wherein a second image is obtained from said second scanning procedure (col.2, lines 55-65); and

means for transforming said second image to obtain a third image according to a scope of the first image and a third dpi by using a program; (plurality of resolution sampling unit 25 of scanner 24 to determine the resolution, col.3, lines 1-10+); and wherein said first scanning direction is generally opposite to said second scanning direction (as shown in fig 1n and to, slide able scanning module 18 of fig 1, moves back and forth during scanning of the document, col.2, lines 445-50+).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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10/054,961
Art Unit: 2625

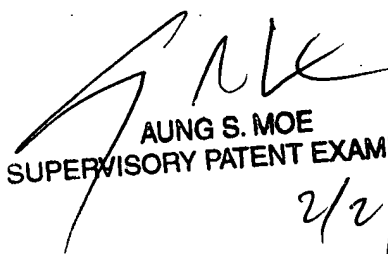
Page 12

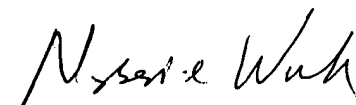
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AUNG S. MOE
SUPERVISORY PATENT EXAMINER
2/2/08


Negussie Worku
Examiner
Art Unit 2625